

Date: Monday, 22/09/2008 1:59:54 PM
User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BRACKET ASSEMBLY
Job Number : 42194 - 1	
Estimate Number : 10291	
P.O. Number :	
This Issue : 22/09/2008 S.O. No. :	Part Number : D3183044
Prsht Rev. : NC	Drawing Number : D3183 REV C1
First Issue : 11	Project Number : N/A
Previous Run : 40251	Drawing Revision : C1
Written By :	Material :
Checked & Approved By :	Due Date : 25/10/2008
Comment : Est Rev: Pick: A 04.02.18 New issue KJ/DS	Qty: 25 Um: Each
Est Rev: B Changed Mat Size 08-06-26 JLM	Verified By: EC

split 9
split 14

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M174B1500X02250 17-4 SS Bar 1.50 X2.250



Comment: Qty.: 0.4812 f(s)/Unit Total: 12.0304 f(s)
Material: 17-4 SS Bar per AMS 5604/5643
(M17-4-B1.500x02.250
Identify for D3183-4
Batch: M108309

2.0 BAND SAW BAND SAW



Comment: BAND SAW
Cut blanks: (1.500" x 2.000") 5.500" long

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3183-4 as per Fello FA322 and Dwg D3183
Identify as D3183-4

2-Deburr

4.0 3-Scribe batch number



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

INSPECT PARTS AS THEY COME OFF MACHINE

Review + Inspect for
transit damage
Ensure C/C 24/10/08

muf 08/12/12

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 42194

Part Number: D3183044

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC

SECOND CHECK



Comment: ~~SECOND CHECK~~

Inspect level 8

508/12/12 (x9)

6.0

D312121

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 50.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3121-21

Bolt B43536

SB 08/12/12 (9)

7.0

D3183045

Bearing Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total: 50.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3183-045 Bearing Ass

M42179

SB 08/12/12 (9)

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
Assemble D3183-043 as per Dwg D3183.

08/12/12 (9)

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

508/12/12 (x9)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

08/12/12 (9)

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/12/12 (9)

Job Completion



NLF 08-12-12

DART AEROSPACE LTD		Work Order: 42194-1
Description: Bracket		Part Number: D3183-4
Inspection Dwg: D3183	Rev: C1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
R0.190	+/-0.030	.187	✓			
R0.063	+/-0.010	.062	✓			
0.188	+/-0.010	.188	✓			
0.070	+/-0.010	.072	✓			
0.100	+/-0.010	.101	✓			
Ø0.201 x 0.100	+/-0.010	.205 x .104	✓			
0.183	+/-0.010	.180	✓			
5.32	+/-0.030	5.33	✓			
5.036	+/-0.010	5.04	✓			
2.120	+/-0.010	2.120	✓			
1.290	+/-0.010	1.285	✓			
0.365	+/-0.010	.362	✓			
0.218	+/-0.010	.212	✓			
1.030	+/-0.010	1.030	✓			
1.90	+/-0.030	1.89	✓			
1.012	+/-0.010	1.015	✓			
Ø0.201 x 0.100	+/-0.010	Ø .203 x .099	✓			
0.786	+/-0.010	.786	✓			
Ø0.392	+0.002/-0.000	Ø .393	✓			
R0.19	+/-0.030	R.19	✓			
3.954	+/-0.010	3.952	✓			
0.162	+/-0.010	.162	✓			
R0.19	+/-0.030	R.19	✓			
R0.25	+/-0.030	R.250	✓			
4.26	+/-0.030	4.26	✓			
2.800	+/-0.030	2.800	✓			
Calculated dimension						
0.162	+/-0.010	.162	✓			
0.615	+/-0.010	.614	✓			
0.435	+/-0.010	.434	✓			
0.200	+/-0.010	.203	✓			
0.381	+/-0.010	.381	✓			
0.032	+/-0.010	.034	✓			

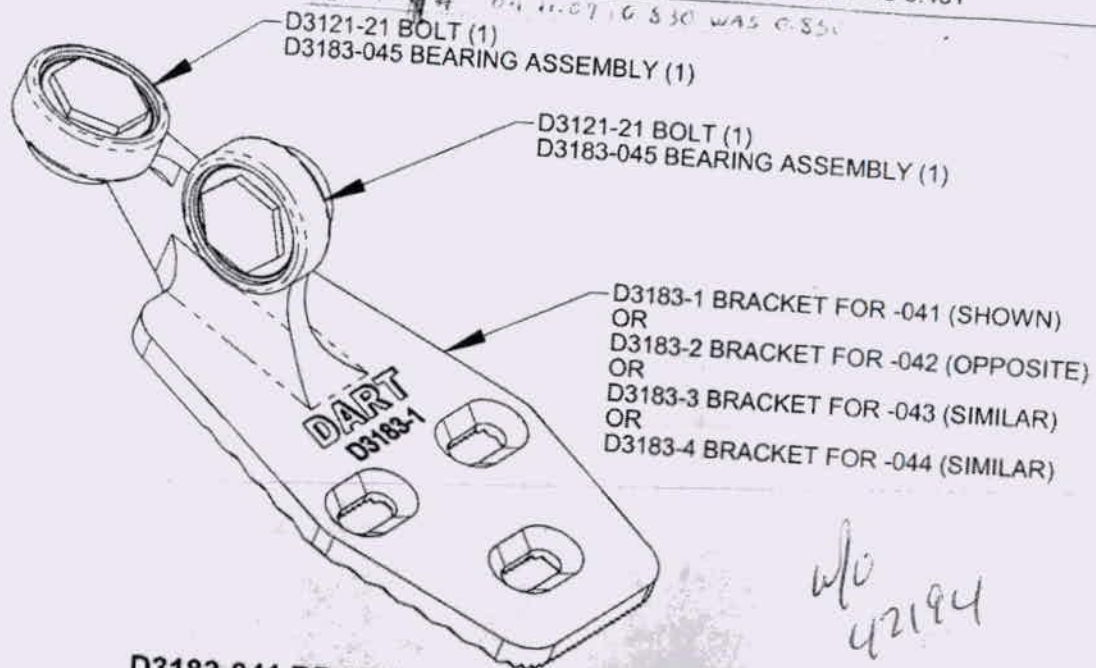
Measured by: mmf	Audited by: S	Prototype Approval:	N/A
Date: 08/12/11	Date: 08/12/12	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	03.11.12	New Issue P/O D3183-044	KJ/RF	
B	04.03.15	Changes as per revision C	KJ/JLM/RF	
C	04.06.15	Dimension 2.800 was 2.080; removed 1.155, 0.36 dimensions	KJ/JLM	
D	06.03.09	Dwg Rev update	KJ/JLM	
E	08.01.16	Dimensions revised	KJ/EC/DD	

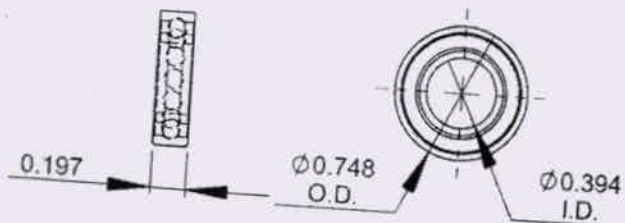


DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3183	REV. (
DATE		TITLE BRACKET ASSEMBLY	SHEET 1 OF
A	03.01.24	NEW ISSUE	SCALE 1:
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
C1	04.11.07	0.830 WAS 0.831	

RELEASED
04 03 11

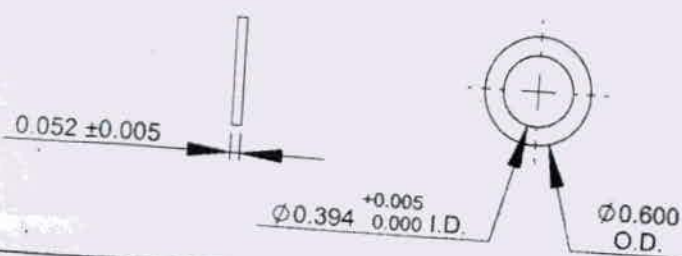


D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES

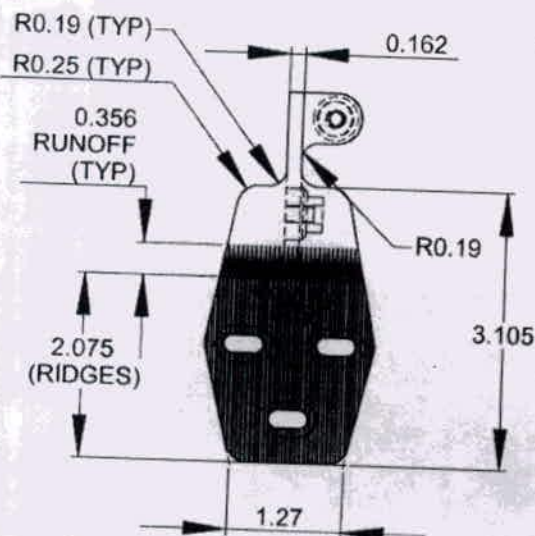
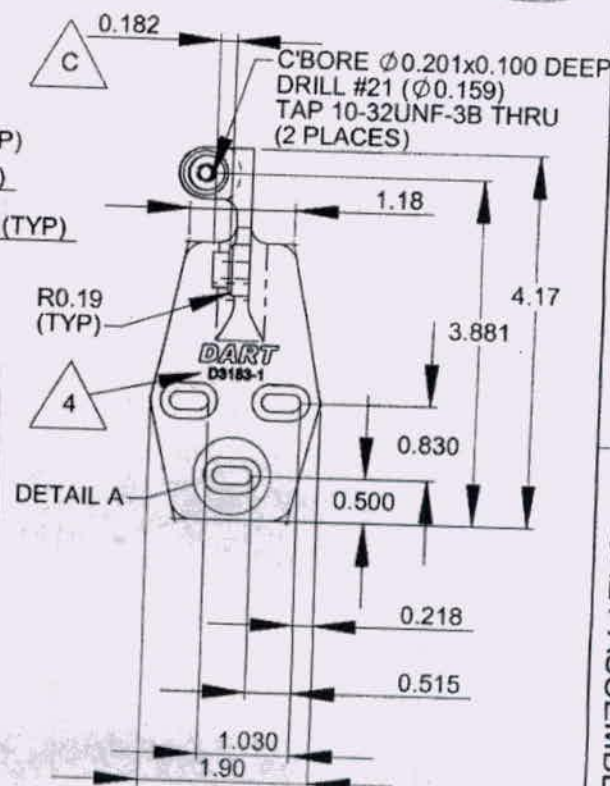
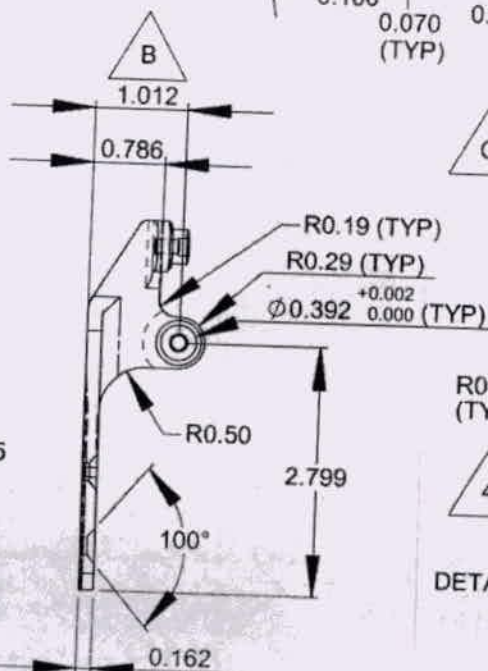
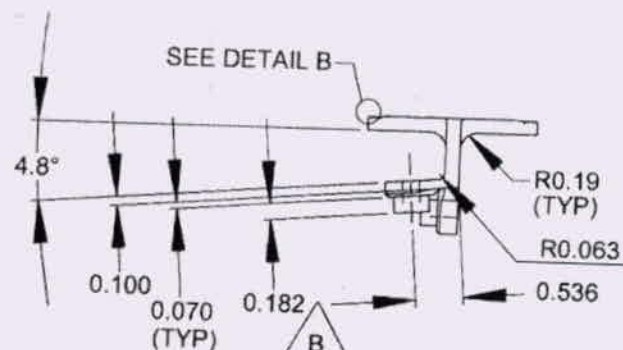


D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

DART

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DATE 04.02.17	DRAWING NO. D3183	REV. C
TITLE BRACKET ASSEMBLY	SHEET 2 OF 4	SCALE 1:2

RELEASED
4-8-01

**D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE**

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

info 42194

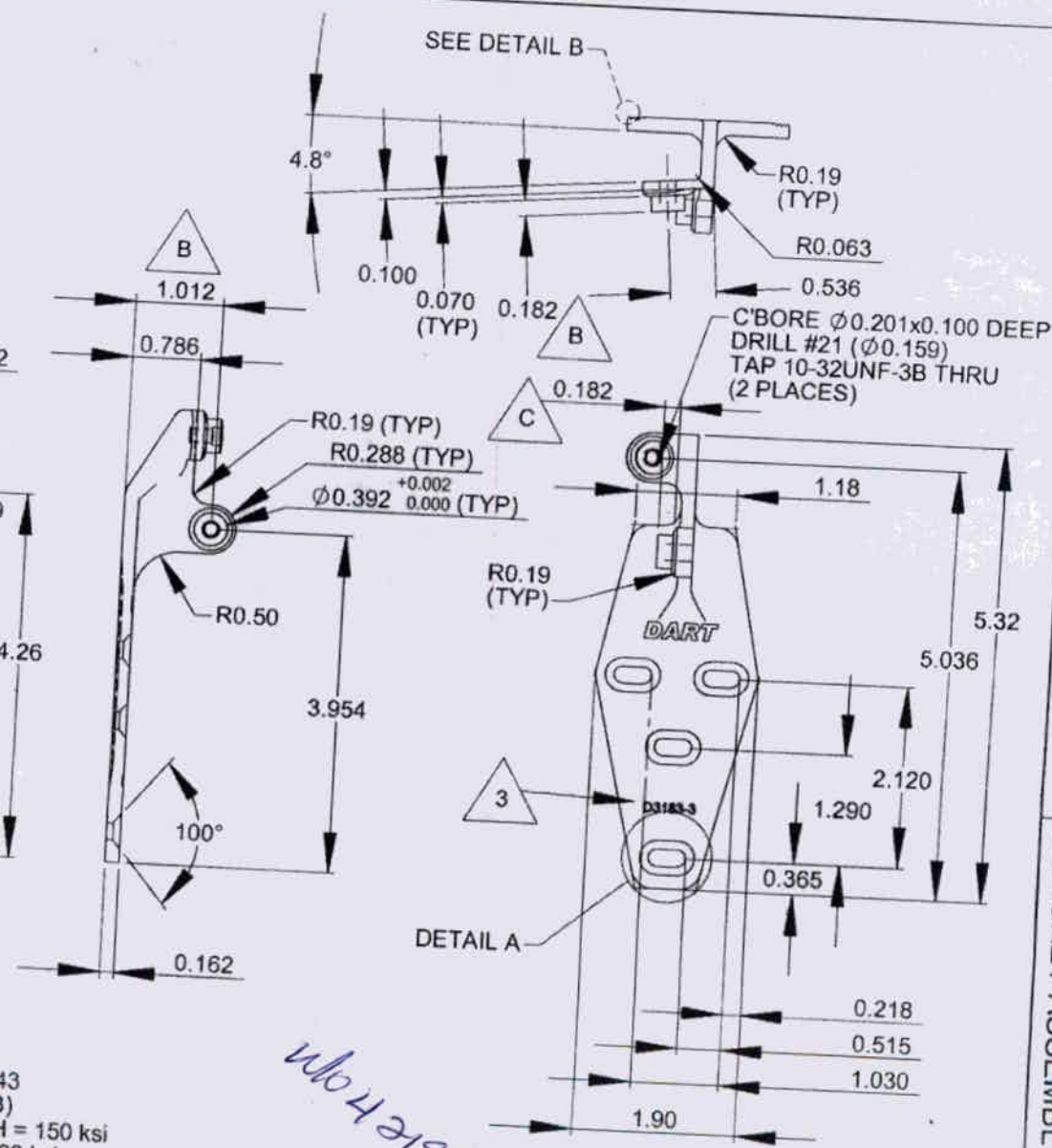
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CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV
04.02.17	D3183	1
TITLE	BRACKET ASSEMBLY	SHEET 3 OF 1



Handwritten note: 7/16/17

- D3183-3 BRACKET SHOWN**
 (REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
 (REPLACES BELL P/N 412-030-304-106)
- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
 (REF DART SPEC. M17-4-B)
 MIN ULTIMATE STRENGTH = 150 ksi
 MIN YIELD STRENGTH = 100 ksi
 - 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
 - 3) ENGRAVE DART P/N & LOGO AS SHOWN
 - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) ALL DIMENSIONS ARE IN INCHES

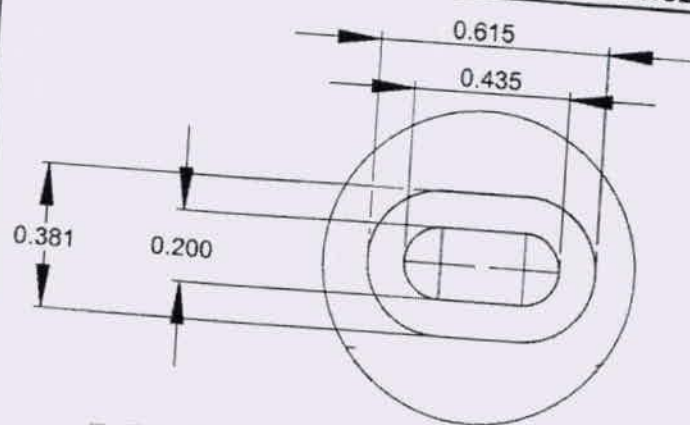
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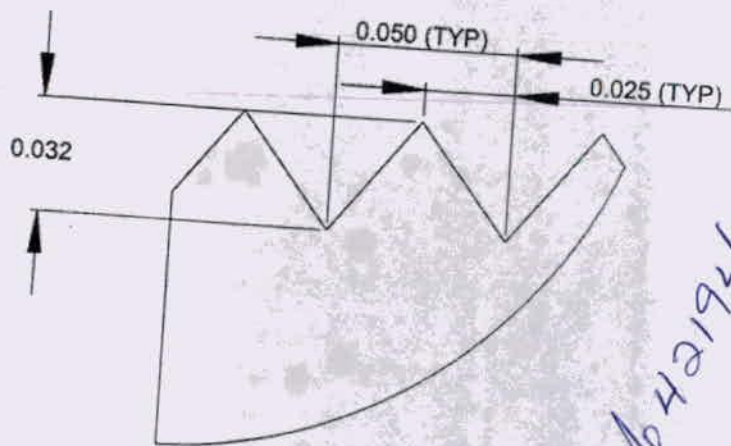


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CHECKED	APPROVED	DRAWING NO. D3183	REV. C
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SHEET 4 OF 4
			SCALE 1:1



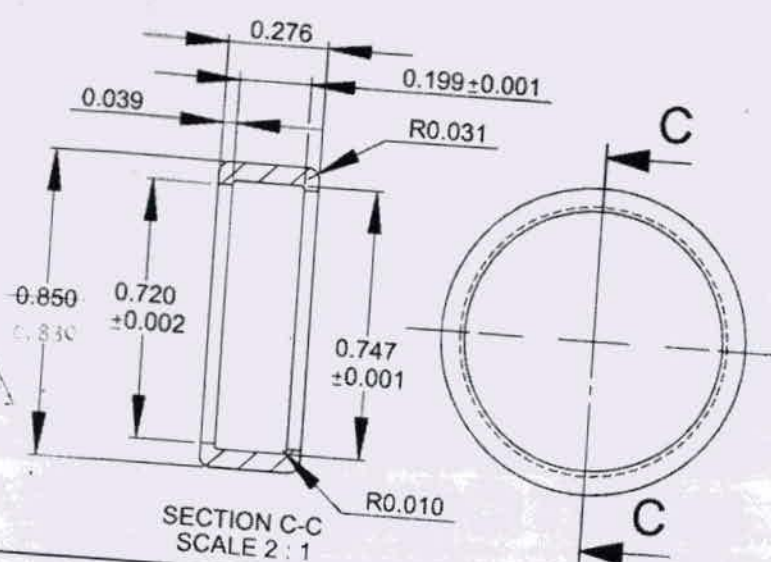
DETAIL A (2 : 1)

RELEASED
04.03.01



DETAIL B (20 : 1)

42194



SECTION C-C
SCALE 2 : 1

D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP